

line 16, delete "it";

line 17, "is the present status that"  
should read --as presently employed--.

IN THE CLAIMS:

Please cancel claims 1-10 without prejudice or disclaimer.

Kindly add claims 11-44 as follows:

--11. A fabrication method of a semiconductor

device comprising:

- (a) forming, on a substrate, an insulating film at which at least one of a wiring pattern or a contact pattern is formed;
- (b) forming a metal in the at least one of the wiring pattern or the contact pattern;
- (c) polishing a surface of the metal; and
- (d) washing the polished surface of the metal by (i) conducting an ultrasonic wave washing of said polished surface employing a washing liquid; and (ii) conducting a physical washing of said polished surface after the ultrasonic wave washing.

12. A fabrication method of a semiconductor device according to claim 11, wherein said polishing step (c) is conducted employing chemical mechanical polishing.

13. A fabrication method of a semiconductor device according to claim 11, wherein said ultrasonic wave washing is carried out at a frequency band of not less than 800 kHz.

14. A fabrication method of a semiconductor device according to claim 13, wherein said frequency band is a range of 1 MHz to 3 MHz.

15. A fabrication method of a semiconductor device according to claim 11, wherein said ultrasonic wave washing is carried out while said washing liquid is discharged from a nozzle.

16. A fabrication method of a semiconductor device according to claim 11, wherein said ultrasonic washing is carried out while the substrate with said polished surface thereon is rotated at 1000-2500 rpm.

17. A fabrication method of a semiconductor device according to claim 11, wherein said physical washing is conducted by brush scrubbing or high-pressure jet washing.

18. A fabrication method of a semiconductor device according to claim 11, wherein said physical washing is carried out using a sponge.

19. A fabrication method of a semiconductor device according to claim 18, wherein said sponge comprises polyvinyl alcohol.

20. A fabrication method of a semiconductor device according to claim 11, wherein ultrasonic washing is repeated after said physical washing.

21. A fabrication method according to claim 11, wherein the at least one of said wiring pattern or said contact pattern is formed by forming the insulating film and etching the insulating film.

22. A fabrication method according to claim 11, wherein said insulating film comprises a plurality of laminated insulating layers.

23. A fabrication method according to claim 22, wherein said insulating film includes a first insulating layer having a polished surface and a second insulating layer formed thereon.

24. A fabrication method according to claim 23, wherein said insulating film further includes a third insulating layer formed of a material different from that of said second insulating layer.

~~Sub 2~~  
25. A fabrication method according to claim 11, wherein said metal is Al, Cu, Au, Cr, Mo, Pt, Ti or an alloy thereof.

26. A fabrication method according to claim 25, wherein said alloy is AlSi, AlCu or AlSiCu.

27. A fabrication method according to claim 11, including forming a barrier metal prior to forming the metal.

28. A fabrication method according to claim 11, wherein said metal is additionally formed on a top surface of said insulating film.

29. A fabrication method according to claim 11, wherein the polishing of a surface of said metal is conducted until the metal surface is at the same level as a top surface of said insulating film.

~~4203~~ 30. A fabrication method according to claim 11, wherein said polishing step is performed by a polishing with a slurry containing an abrasive.

31. A fabrication method according to claim 11, wherein said washing liquid is pure water.

32. A fabrication method according to claim 11, wherein the ultrasonic wave washing is conducted to reduce an amount of abrasive particles adhered to the polished surface and, thereafter, the amount of abrasive particles is further reduced by the physical washing.

33. A fabrication method of a semiconductor device comprising:

- (a) forming, on a substrate, an insulating film at which a concave section is formed;
- (b) forming a metal in the concave section;
- (c) polishing a surface of the metal; and
- (d) after subjecting the polished surface to an ultrasonic wave washing, further subjecting the polished surface to a physical washing.

34. A method of cleaning a semiconductor device having a polished metal surface, comprising:

- (a) subjecting the polished metal surface to an ultrasonic wave washing; and thereafter
- (b) subjecting the metal surface to a physical washing.

35. A method according to claim 34, wherein said ultrasonic washing is carried out in a frequency band of not less than 800 kHz.

36. A method according to claim 35, wherein said frequency band is a range of 1 MHz to 3 MHz.

37. A method according to claim 34, wherein said ultrasonic wave washing is carried out while said washing liquid is discharged from a nozzle.

38. A method according to claim 34, wherein said ultrasonic wave washing is carried out while the substrate with said polished surface thereon is rotated at 1000-2500 rpm.

39. A method according to claim 34, wherein said physical washing is conducted by brush scrubbing or high-pressure jet washing.

40. A method according to claim 34, wherein said physical washing is carried out using a sponge.

41. A method according to claim 40, wherein said sponge comprises polyvinyl alcohol.

42. A method according to claim 34, wherein said ultrasonic washing is repeated after said physical washing.

43. A method according to claim 34, wherein said washing water is a pure water.

44. A method according to claim 34, wherein the ultrasonic wave washing is conducted to reduce an amount of abrasive particles adhered to said polished surface and, thereafter, the amount of the abrasive particles is further reduced by said physical washing.--

REMARKS

This is a continuation-in-part of Application Nos. 08/979,957 and 08/714,437.

In parent Application No. 08/979,957 the claims were rejected as obvious over Omika '496 in view of Ueda '646. A separately filed information disclosure statement will make of record information from the parent application and other information. The Examiner has cited Omika '496 at column 4, line 5, as teaching "a process for polishing a film." However, it is submitted the cited passage merely